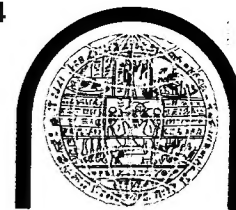


AREA A



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PRESERVATION FROM OUTSIDE DANGERS

Part II  
The Florence, Italy, Disaster

By

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#### The Florence, Italy, Disaster

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I am sure all of you will agree that one of the most appalling natural disasters in modern times occurred at Florence, Italy, late in 1966.

I was visiting Italy at the time of the Arno flood. The Italian press, radio and television devoted virtually their entire news coverage to this event - very much as our news media in the United States gave around-the-clock coverage to the assassination and funeral of President John F. Kennedy three years earlier.

In the press throughout the world, the event was given impressive coverage - impressive mostly from the standpoint of the damage to art treasures and to priceless paintings. While the damage to documents was also covered, it did not receive the in-depth treatment which it deserved.

The thought occurred to me that there were lessons to be learned from this disaster - lessons not only for librarians, scholars, and teachers, but for men and women everywhere.

In that disaster, many documents representing an important part of our human heritage were lost and can never be replaced. While the loss of the original books and manuscripts might not have been prevented by microfilming, at least it would have enabled us to preserve the information in the documents.

I should mention here that a long step forward has been taken with the announcement, in Rome last March, of a massive project to microfilm all Italian works of art within Italy, as well as those in other countries owned by the Italian government. This project is the first instance in which a nation has set out to take an exhaustive inventory of its cultural heritage and establish an automatically retrievable listing of its works of art.

I shall discuss the new Italian program in greater detail a bit later. But if it had been well advanced three years ago, there would not, perhaps, have been a need for me to prepare this special report on the damage to priceless original documentary materials in Florence.

As an introduction to this report, I would first like to show a short film. This motion picture footage consists of clips from newsreels which were taken at the outset of the flood.

(LIGHTS OUT – SCREEN 3 MINUTES OF 16mm NEWSREEL FOOTAGE)

(Film clips will be matched to action described in the narration).

#### NARRATION:

The people of Florence will not soon forget November 5th, 1966, a day that will be black in the minds of Florentines for centuries to come.

For it was the day that the beautiful art-rich Italian city was mercilessly ravaged by the rampaging Arno River.

The rain-swollen Arno, normally nothing more than a stream, rose swiftly in the night.

It crested its steep banks at daybreak and gushed into the narrow streets of the old Renaissance city, into the cellars, into churches and libraries treasured by the world - tossing cars about like toys and leaving tons of oil-slick mud in its wake. In a matter of several hours, a heritage that took centuries to acquire was severely damaged - an important part of it irretrievably so.

Damage in dollars was estimated in tens of millions.

Thousands had to live without water and food for days and were without homes for weeks.

Hundreds of artisans, Florence's economic

backbone, were wiped out.

But the River caused more than economic harm.

In the art galleries, the museums and especially the libraries, it bruised Florence's very soul - her history - of which she and the world are most proud.

In all, some 1,200 paintings on wood and canvas were badly damaged by the water, mud and oil.

And seemingly infinite was the number of documents, manuscripts and books - some themselves containing valuable art - that were turned into soggy, muddy, oily pulp.

Between four and five million books and manuscripts were ruined. Hundreds of students and soldiers took more than a month to remove them from the bowels of a score of libraries. The tedious work of restoration began and in many cases the mud and scum had to be scraped by knife from the parchment pages.

(END OF FILM - LIGHTS UP)

The hardest hit were the National Library and the State Archives, located several hundred yards apart on the Arno's east bank. At the National Library, Italy's second largest, the toll was overwhelming: 100,000 volumes from the Medici and Palatine collections; 45,000 18th Century books; 70,000 modern works; 40,000 theses and thousands of manifests - all waterlogged. It was hoped that 80 per cent of the material could be recovered. The rest was written off as lost.

Fortunately, the rare documents section, the only microfilmed section of the library, was not touched. At the State Archives, as at the other libraries, the muddy waters poured into the basement of the buildings, which also houses the Uffizi Art Gallery. Some 40 of the library's 250 rooms were flooded by up to six feet of water that inundated 50,000 volumes - many of them hand-written on parchment centuries ago - and hundreds of thousands of documents.

"We had no warning at all," Professor Sergio Camerani, director of the State Archives said. "The custodians had time only to save their lives." None of the highly valuable documents, such as the papers of Niccole Machiavelli and Dante Alighieri, were touched. But to Camerani, and scholars the world over, everything in the Library was valuable. "A book by its very nature is invaluable," said Camerani. "The older they are, the more invaluable they become and many of those that were ruined date back to the 12th Century."

Realizing the truth of Camerani's words, hundreds of Italian and American students rushed to help rescue Florence's books. History Professor Michael Pulman of Florida State University's Florence Study Center, had 125 FSU students on the job the day after the flooding. Some 80 students from Stanford University's Florence Center worked with the Floridians, as did many other Americans.

I would now like to show for you some colored slides of this part of the operation which was most interesting.

(LIGHTS OUT FOR 35mm COLOR SLIDES)

- SLIDE 1    Here two students examine several of 250,000 books damaged at the Viessieux Library in Palazzo Strozzi. The Library's books, all of them by modern (19th and 20th Century) American, English, French and German authors, were covered with sawdust and laid out on the upper floors of the Strozzi to dry.
- SLIDE 2    These students are sprinkling moisture-absorbing sawdust on books at Viessieux Library. Later, pieces of Japanese paper were inserted between the wet pages to further dry the books.
- SLIDE 3    Viessieux Library Director, Professor Alessandro Bonsanti inspects waterlogged books and documents piled on stairs at Palazzo Strozzi. The books were later carted away to warehouses to be dried out.
- SLIDE 4    Professor Sergio Camerani, Director of the State Archives in Florence's Uffizi Gallery, watches a student inserting Japanese paper between the pages of one of the 50,000 volumes in the library that were damaged by the floods. Man with glasses and blue smock is Giorgio La Pira, former Mayor of Florence.
- SLIDE 5    Students insert Japanese paper between pages at State Archives, where millions of documents were also damaged.
- SLIDE 6    This is a closeup of a 12th Century ledger from the Monastery of Santa Maria Novella, one of the older books in the State Archives.

- SLIDE 7 Another 12th Century work, containing the stem of Florence on its cover, that was damaged at the State Archives.
- SLIDE 8 Professor Camerani, UPI's Lotito, and custodian look down into one of the 40 rooms that were flooded at the State Archives. There are a total of 250 rooms in the Archives in all.
- SLIDE 9 This is what the three men saw when they looked down - a gaping hole in the floor over the basement created by raging flood waters.
- SLIDE 10 Worker pinpoints the level Arno River's floodwaters reached on the first floor of the State Archives. The basement was completely flooded.
- SLIDE 11 Italian and American students work on restoration of damaged books. They are sitting and eating on sacks of sawdust.

(END OF SLIDES - LIGHTS UP)

Alice Reid, a fine arts graduate from Rochester, N.Y., was quoted as summing up the student feeling. "I'm going to need some of these books," she said. "If they are lost, there is no way of replacing them." Like the others, she was first called on to wade into library basements to seek books beneath mud. Later, she was involved with the task of inserting dry sheets of paper between soggy pages in an effort to dry them out. "Take this book," she said of one she was working on in the State Archives. "It's just a 13th Century financial ledger from the Monastery of Santa Maria Novella, but it is important to art students like me. Books like this record prices monks paid for art works, and they are invaluable to the study and authentication of art."

Miss Reid then added what I told many times in the days following the disaster: "It's a shame they didn't microfilm this material."

There had been some microfilming at the State Archives. The photography began there about eight years ago. Only 12 per cent of the library's contents had been filmed and the steel cabinets containing it were located safely on the second floor. The situation was worse at the National Library, where the only microfilmed works were those in the rare documents section. Other items were microfilmed only on the request of scholars willing to pay the bill. There, as elsewhere, after the flood officials were trying to determine who had microfilmed copies of books and manuscripts that were irretrievable.

Directors of the Cherubini Musical Academy hoped to recover the contents of much that was destroyed from Vincent Duckles, University of California music professor who spent a year there and microfilmed thousands of musical pieces. Lost at the Cherubini were a majority of the Italian composer's original works and 15th, 16th and 17th Century musical

manuscripts.

In most cases, the absence of microfilming was due to a shortage of funds and not to a lack of interest in the process. "It's a matter of means," said Professor Eugenia Levi, conservator of rare manuscripts at the State-controlled National Library. "We had a minimum amount of money for our microfilming program. We had hoped to get more."

The same general comment was made by National Library Director Emanuele Casamassima and State Archives Director Camerani. Even Alessandro Bonsanti, director of the modern collection, Anglo-Saxon Viessieux Library in Palazzo Strozzi, was disturbed about the lack of microfilming. No ancient, hand-inscribed parchment was lost at the Viessieux, but some 250,000 volumes soaked up water and oil. Bonsanti estimated 30 per cent of the books were not restorable. He was more concerned by the loss of rare first editions, among them some 15 of Henry James' work, than with the loss of words.

"The words exist elsewhere," he said. "We can get them back, but not the rare editions. We should have microfilmed them anyway," he added. "But we didn't, and that is worse." Like the others, Bonsanti paused only briefly to discuss what should have been done. He was more concerned with what had to be done to save the millions of imperiled books, documents and manuscripts.

The enormity of the job that lay ahead was sized up by Benedictine Monk Mario Pinzuti, an expert in book restoration and one of the first to arrive in Florence after flood waters subsided. "It will take 15 years to restore the damage to books," he said. "And if we are lucky we will be able to rescue 80 per cent of the works. No one has ever had to face any recovery operation of this magnitude," he added.

The task of restorers like Father Pinzuti was made doubly difficult by the presence of oil, washed out of basement heating units and cars, in the waters that damaged books. "The oil is especially difficult to clean away," he said. "If they were just water-damaged our task would be much simpler."

But there were other problems - among them "serious errors" made by well-meaning persons in their rush to save the documents. The "mistakes" consisted of putting talcum powder on waterlogged books without first inserting dry sheets of paper between the wet pages, and in placing some documents - especially those made of parchment - in the wrong places to dry. No one can be blamed for the errors because of the chaos that existed in the libraries and in all of Florence the day after the flooding.

Students waded chest-deep in water, grabbing floating books. They dug for books buried under mud and cleaned them off with their hands and on their own shirts and pants. Few materials were available to dry the books, and in some cases talcum was used.

"The talcum caused books to become as hard as blocks of cement," said Father Pinzuti,

head of book restoration at the Monte Oliveto Monastery near Siena. "Some of them are impossible to pry apart. There is only one way to begin restoration and that is to insert Japanese paper between the pages of wet books to dry them out."

The inserting job was laborious and time-consuming and there were never enough hands to do it.

With the works which had been recorded on the parchment, the mistake was putting them in very hot places - such as tobacco drying warehouses - causing them to turn into what Father Pinzuti described as "baked bricks." he explained, "Parchment absorbs much more water than paper. If it is dried in dry, hot places, it shrivels up never to regain its shape again. There is only one way to dry it and that is in a natural environment."

Despite the problems, the teams of restorers were determined to do their best. The procedure they followed was generally the same as that being used by Greek-Catholic monks at the San Nilo Abbey south of Rome in the Alban Hills. There, books were dried out in a room equipped with a huge dehumidifier that literally pulled the moisture from their pages. The monks then stripped the bindings, washed each page with water and fine paint brushes and hung them to dry on clotheslines. Some of the books that were sealed tight were coaxed loose with injections of a formaldehyde solution.

When the pages dried, they were laid one on top of the other and placed beneath large presses to iron them out. Because of the large number of books to treat, the monks stopped their immediate intervention there to return to thousands of other stained pages awaiting their attention. Later, they would have to do the actual restoration - grafting paper into torn pages, mending covers, rebinding the books and, lastly, "gassing" them to kill paper-destroying micro-organisms.

The big question mark, according to Father Pinzuti, was how ink would hold up to the washing. "It is pretty safe to say that the ink - especially the colored paintings on manuscripts - will lose 25 per cent of its clarity. What will happen to the ink over the long run we just don't know."

Because of the threat of fading and the unpredictable reaction of ink, the librarians were hoping for a stepped-up program of microfilming. "But there are other things that will have to be done first - namely, saving the books." said Bonsanti. "Microfilming is important, but it is a matter of funds."

From the earliest days of photography, men who saw its possibilities for historical purposes predicted the day when our library collections would contain film as well as paper. While some progress has been made in this direction, the lessons learned at Florence indicate it is not enough.

Which leads me now, directly, to the new Italian art microfilming project. . .



It is huge, encompassing hundreds of thousands of paintings and sculptures produced over 20 centuries - plus archaeological sites, historical centers and buildings of artistic interest.

The head of the government agency charged with overseeing Italy's artistic and cultural treasures is Professor Bruno Molajoli. He made this statement last March: "The ability to duplicate the microfilmed files easily means that universities, foundations and museums throughout the world will be able to maintain their own microfilm files of any portion of the vast Italian cultural heritage - an invaluable assist to artistic research" Unquote....

I am proud to say that my company has been selected to supply the microfilm materials and equipment to be used in this, the first project of its kind to be organized on a truly nationwide basis.

The first three microfilm centers are being installed this year in Rome, Florence, and Bologna. Next year, six other cities will receive the necessary equipment to begin microfilming the works of art in their respective areas.

When completed - in 20 years or longer, according to Professor Molajoli - the microfilmed files will enable accurate restorations to be made of art works that have, in the course of time, begun to deteriorate, or that have been damaged by floods or fire. The files will also provide a permanent identification in case of theft or loss.

I now want to show a few color slides to give some idea of the type and quality of the artistic materials involved in the new Italian project. (Note: slides are yet to be selected of the some 60 just received from Milan.)

The project, enormous as it is, reveals several important, indeed glaring, omissions. NOT included in the definition of "art" are music and literature. What of Palestrina, Vivaldi, the Scarlattis, Rossini, Verdi, Puccini? What of Dante, Ariosto, Petrarch, Boccaccio, Pirandello, D'Annunzio? There are only two major areas not included.

But there had to be a beginning somewhere - and a tremendously important beginning has been made.

I am, of course, speaking about the future. I am sure that many of you here have been using, microfilm for years. Let's face it - it is not any longer a new technology, basically. It has come of age in the last five years or so, but most of you have been using it, one way or another, much longer than that.

The question is - are you exploiting, to the fullest, its *modern* implications? Are you exploiting the *new* possibilities now available in this rapidly developing technology?

Are you thinking only, or even primarily, of gaining space in your physical environments for new materials? Are you thinking also of security - of preserving copies of old, decaying original documents? If so, these are reasons enough to consider and use microfilm.

But are you also thinking - as Professor Molajoli is thinking - of making your research materials available to others? -whether these original materials are stored in St. Louis or Rome or Mexico City or Tokyo or London or Salt Lake City or Paris or Boston or Vienna - or in any of the thousands of collections, public and private, all of them constantly growing, in all parts of the civilized world?

Are you perhaps thinking, as I am, of a WORLD POOL of research historical material, instantly accessible to anyone in any major city anywhere? And even readily made inexpensively available to the small schools and libraries of the rural countryside? And are you, hopefully, thinking of the generations to come after we have gone?

Microfilming for space-saving and security purposes is an obvious benefit - indeed, it is the most obvious benefit from the standpoint of most of us in this room. But I am referring not only to those concerned with the collecting, housing and preservation of valuable books, art works, documents and paperwork of any kind.

I am referring also to what microfilming can do for our young people today and for posterity. Not only to preserve microfilmed reproductions of valuable materials but also to make them available to students everywhere and at little cost - to make them available now and in the future, when our young people (and *their* young people later on) will need them.

Perhaps we should all look once again to the sources of our culture and our heritage, and we should make known to the custodians of these collections - to you people here today - the benefits of modern day microfilm techniques.

Perhaps the lesson learned at Florence is that, through closer cooperation between people like you - the guardians of irreplaceable original materials - and people like us - the members of the microfilm industry - perhaps the lesson of Florence is that through such cooperation there need never again be another disaster of this kind.

Thank you for your kind attention.